

REMARKS

The application has been revised in light of the March 3, 2004 Office Action. Claims 2-21 are pending in the application. Claims 3 and 14 have been amended.

Claims 2-19 and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by US Patent No. 5,868,773 to Danks et al.; US Patent No. 5,904,699 to Schwemberger et al.; US Patent No. 4,931,042 to Homes et al.; and US patent No. 5,387,197 to Smith et al.

Claim 20 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-10 and 14-21 were rejected under the judicially created doctrine of obviousness-type double patenting in view of the parent of the present application, namely, U.S. Patent No. 6,319,266. A terminal disclaimer will be filed if still required upon an indication of the allowability of the claims.

Claims 2-19, and 21 were rejected under 35 U.S.C. 102(b) in view of US Patent No. 5,868,773 (Danks et al.).

With regard to independent claim 3 and claims 2, 4-10, which depend therefrom, the Danks et al. disclosure does not teach or suggest each and every limitation of claim 3. The Danks et al. patent does not teach or suggest an obturator assembly of a trocar system, wherein the obturator assembly includes a release member having a button portion and a camming surface; wherein the button portion protrudes at least partially through an opening formed in a distally facing end surface of an obturator housing, as recited in claim 3. In particular, claim 3, as presently amended, recites in part “application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical

movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield.”

In contrast, the trocar disclosed in the Danks et al. patent is armed or actuated when the trigger 48 is depressed and pushed forward toward the piercing tip 80 as follows:

In order to permit the shield 15 to be retracted [i.e. moved proximally], the latch means 33 must first be armed or actuated. In the embodiment illustrated in FIG. 2A, the distal end 22 of the linking member 24 engages with a trigger 48. When the trigger 48 is depressed and pushed forward toward the piercing tip 80 [i.e. distally], the linking member 24 is likewise pulled forward. A hook 29 on the proximate end of the linking member 24 is engaged in a cradle 28 on the pivoting chock 25. As the linking member 24 is pulled forward, it causes the pivoting chock 25 to turn on its pivot 26 and thereby rotates the solid portion 30 away from the lug 32 on the proximal end 50 of the shield 15. This arms or actuates the trocar 10.

(Column 4, lines 50-61.)

In contrast to the Danks et al. patent, the trocar system as recited in the present claims requires no manual manipulation of an actuator or trigger. The trocar, as recited in claim 3, is automatically armed or actuated when a proximally directed force is applied to the distal end of the button portion of the release member of the obturator assembly. For example, when the obturator assembly is pressed against the housing of a cannula assembly, the button portion is depressed and the trocar is armed. By contrast, the Danks et al. patent explicitly requires that “the locking mechanism must be actuated before the shield will retract to expose the piercing tip”, as disclosed in the abstract.

Accordingly, claim 3 and claims 2, 4-10, which depend therefrom, are believed to patentably distinct over the Danks et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to independent method claim 11 and claims 12-13, which depend therefrom, claim 11 recites in part the step of approximating an obturator assembly with a cannula assembly such that a button portion of a release member is urged proximally (i.e. away from the piercing tip) and a camming surface of the release member imparts lateral movement of a blocking surface of a latch such that the blocking surface is moved to permit relative movement of the shield and a penetrating tip of the obturator assembly.

The Danks et al. patent, in contrast, requires that trigger 48 be depressed and pushed forward toward the piercing tip 80 (i.e. distally). Thus, the button portion of the release member in claim 11 is moved in an opposite direction, compared to trigger 48 of the Danks et al. patent.

Accordingly, claim 11 and claims 12-13, which depend therefrom, are believed to patentably distinct over the Danks et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to independent claim 14 and claims 15-21, which depend therefrom, the Danks et al. patent does not teach or suggest an obturator assembly of a trocar system wherein the obturator assembly includes a release member having a button portion extending distally in axial alignment with at least a portion of the proximally facing surface of the cannula and a camming surface as recited in claim 14. With this arrangement, it is possible, for example, to actuate the trocar by approximating the obturator assembly with the cannula. There is no structure or portion of trigger 48 disclosed or suggested in the Danks et al. patent that extends distally in axial alignment with at least a portion of the proximally facing surface of the cannula. Rather, trigger 48 is mounted to the cannula housing and requires manual manipulation, i.e. the trigger 48 is depressed and pushed forward toward the piercing tip 80. As a result, the user of

the Danks et al. trocar must assemble the obturator assembly with the cannula and then, in a separate step, actuate the apparatus by depressing the trigger.

Accordingly, claim 14 and claims 15-21, which depend therefrom, are believed to be patentably distinct over the Danks et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-19, and 21 were rejected under 35 U.S.C. 102(b) in view of US Patent No. 5,904,699 (Schwemberger et al.).

With regard to independent claim 3 and claims 2, 4-10, which depend therefrom, Schwemberger et al. does not teach or suggest an obturator assembly with a latch mechanism including a latch operatively associated with the release member, the latch having a blocking surface and a mating surface, the mating surface cooperating with the camming surface of the release member such that application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield, as recited in claim 3.

The Schwemberger et al. disclosure includes shield 56 being manually moved proximally to expose a flat cutting blade 61 by “precocking” the instrument with a precock lever 52 that is pivotally mounted in the obturator handle 51. See column 10, lines 30-40. Thus, trocar 30 must be “precocked” by depressing the distal end of the precock lever 52 inwardly. When the trocar 30 is precocked, the shield 55 is locked in a retracted position and the flat cutting blade 61 is exposed. The obturator shaft 60 of Schwemberger et al. is slidably mounted in the shield 55 so

that upon pressing the blade against tissue, the obturator shaft 60 moves proximally, unlocking the shield retention mechanism, allowing the shield 55 to deploy distally. Column 5, lines 36-46.

In contrast, the trocar in the present claim is armed or actuated automatically upon application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly. The button portion of the release member moves vertically, moving the camming surface on the release member substantially laterally, moving the latch such that the blocking surface permits axial movement of the shield, as required by claim 3. The release member permits axial movement of the shield, whereas the precocking lever 56 of Schwemberger et al. actually locks the shield 55 in a retracted position.

Accordingly, claim 3 and claims 2, 4-10, which depend therefrom, are believed to be patentably distinct over the Schwemberger et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to independent method claim 11 and claims 12-13, which depend therefrom, the Schwemberger et al. patent does not teach or suggest the step of approximating an obturator assembly with a cannula assembly such that a button portion of a release member is urged proximally (i.e. away from the piercing tip) and a camming surface of the release member imparts lateral movement of a blocking surface of a latch such that the blocking surface is moved to permit relative movement of the shield and a penetrating tip of the obturator assembly, as recited in claim 11. In contrast, the Schwemberger et al. device must first be precocked by depressing the precock lever 52 inwardly in order to impart proximal movement of shield 55. See column 10, lines 30-40.

Accordingly, claim 11 and claims 12-13, which depend therefrom, are believed to be patentably distinct over the Schwemberger et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With respect to independent claim 14 and claims 15-21, which depend therefrom, claim 14 recites in part, an obturator assembly having a latch mechanism disposed generally within the housing, which facilitates changing the configuration of the obturator assembly between a fixed-shield orientation, wherein at least a portion of the guard is maintained to extend at least partially distal of the penetrating tip to prevent puncturing of tissue by the penetrating tip, to a non-fixed shield orientation whereby the guard and penetrating tip are permitted to move relative one another to facilitate puncturing of tissue by the penetrating tip.

In contrast, the trocar disclosed in the Schwemberger et al. patent requires a precocking manipulation wherein the distal end of the precock lever 52 is depressed inwardly thus “unlocking the locking arm 138 that restrict the shield 55 from axial motion.” See column 10, lines 30-40. The shield 55 is then locked into a retracted position. See column 5, lines 2-4 and lines 39-46. Thus the Schwemberger et al. patent expressly requires that the guard be moved to a precocked position, to expose a flat knife, prior to use.

Accordingly, claim 14 and claims 15-21, which depend therefrom, are believe to be patentably distinct over the Schwemberger et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-19, and 21 were rejected under 35 U.S.C. 102(b) in view of US Patent No. 4,931,042 (Holmes et al.).

With regard to independent claim 3 and claims 2, 4-10, which depend therefrom, the Holmes et al. patent does not teach or suggest an obturator assembly having a latch mechanism

disposed generally within the obturator housing, the latch mechanism including a latch operatively associated with the release member, the latch having a blocking surface and a mating surface, the mating surface cooperating with the camming surface of the release member such that application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield, as presently disclosed in claim 3.

In contrast, the Holmes et al. patent discloses trigger 40 which extends through bore 38 allowing sliding movement relative to head 16 along an axis parallel with the longitudinal axis of the shield and obturator. See column 2, lines 57-61. As the trigger 40 moves, an arm 44d of a spring member moves with it, displacing end 44b of the spring member away from a blocking position with respect to the shield. Column 3, lines 32-39 and column 4, lines 52-58. Thus, while the camming surface of the release member, as described in claim 3, moves "substantially laterally," trigger 40, as disclosed in Holmes et al. patent, moves "along an axis parallel with the longitudinal axis of the shield and obturator." Column 2, lines 59-61.

Accordingly, claim 3 and claims 2, 4-10, which depend therefrom, are believed to be patentably distinct over the Holmes et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to independent method claim 11 and claims 12-13, which depend therefrom, claim 11 recites in part the step of approximating an obturator assembly with a cannula assembly such that a button portion of a release member is urged proximally and a camming surface of the release member imparts lateral movement of a blocking surface of a latch such that the blocking

surface is moved to permit relative movement of the shield and a penetrating tip of the obturator assembly. In contrast, trigger 40 in the Holmes et al. patent slides relative to head 16 along an axis parallel with the longitudinal axis of the shield and obturator. Column 2, lines 59-61.

Accordingly, claim 11 and claims 12-13, which depend therefrom are believed to be patentably distinct over the Holmes patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to independent claim 14 and claims 15-21, which depend therefrom, claim 14 discloses a trocar that is automatically armed or actuated such that application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield. As the camming surface of the release member moves laterally, space within the obturator housing is conserved. As discussed above, trigger 40 in the Holmes et al. patent slides relative to head 16 along an axis parallel with the longitudinal axis of the shield and obturator. Column 2, lines 59-61. The obturator of the Holmes et al. patent requires space for the axial movement of the trigger 40 and spring member 44. Homes et al. does not disclose the camming surface as required by claim 3.

Thus claim 14 and claims 15-21, which depend therefrom, are believed to be patentably distinct over the Holmes et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-19, and 21 were rejected under 35 U.S.C. 102(b) in view of US Patent No. 5,387,197 (Smith et al.).

With regard to independent claim 3 and claims 2, 4-10, which depend therefrom, the

Smith et al. patent does not teach or suggest an obturator assembly of a trocar system, wherein the obturator assembly includes a release member having a button portion and a camming surface; wherein the button portion protrudes at least partially through an opening formed in the distally facing end surface of the obturator housing, and a latch operatively associated with the release member, the latch having a blocking surface and a mating surface, the mating surface cooperating with the camming surface of the release member such that application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield, as presently disclosed in claim 3.

By contrast, in Smith et al., the button 270, which is exposed through a lateral side of the handle 180, is moved distally to cam the lockout arm 230 away from the safety shield 190. Column 11, lines 34-57. Thus the Smith et al. patent fails to disclose a button portion protruding at least partially through an opening in the distally facing end surface of the obturator housing, a mating surface on a latch for cooperating with the camming surface of the release member, and a camming surface that moves substantially laterally. In operation, the user must assemble the obturator assembly with the trocar cannula and separately slide the button 270 in a distal direction.

Accordingly, claim 3 and claims 2, 4-10 which depend therefrom, are believed to be patentably distinct over the Smith et al. patent. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

With respect to independent method claim 11 and claims 12-13, which depend therefrom, the Smith et al patent does not teach or suggest the step of approximating an obturator assembly

with a cannula assembly such that a button portion of a release member is urged proximally and a camming surface of the release member imparts lateral movement of a blocking surface of a latch such that the blocking surface is moved to permit relative movement of the shield and a penetrating tip of the obturator assembly, as recited in claim 11. In contrast, the trocar in the Smith et al. patent is approximated as follows:

Prior to using the trocar 20, the surgeon arms the safety shield locking mechanism by displacing the reset button 270 in a distal, axial direction. Displacing reset button 270 distally causes the tab members to engage the back side of the lockout arm 230, reset tabs and cam the lockout arm forward causes the tab members 276 to engage the back side of the lockout arm reset tabs 235 and cam the lockout arm forward.

Column 11 lines 38-43. As discussed above, Smith et al. does not disclose arming or actuating the trocar by approximating an obturator assembly with a cannula assembly so that the button portion is urged proximally.

Accordingly, claim 11 and claims 12-13, which depend therefrom, are believed to be patentably distinct over the Smith et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With respect to independent claim 14 and claims 15-21, which depend therefrom, claim 14 discloses a trocar which is automatically armed or actuated such that application of a proximally directed force to the distal end of the button portion of the release member of the obturator assembly, imparts vertical movement of the release member whereby the camming surface moves substantially laterally and biases the mating surface to move the latch such that the blocking surface permits axial movement of the shield. In contrast, the safety shield locking mechanism of the trocar disclosed in the Smith et al. patent is armed "by displacing reset button 270 in a distal, axial direction." Column 11 lines 37-38. Thus, Smith et al. requires that the reset button 270 be actuated separately and after the trocar cannula and obturator are assembled.

Thus, claim 14 and claims 15-21, which depend therefrom, are believed to be patentably distinct over the Smith et al. patent. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

In view of the above amendments and remarks, each of the pending claims, namely claims 2-21 are believed to be allowable over the art of record. Therefore, reconsideration and withdrawal of the outstanding rejections is respectfully requested. Should the Examiner believe that a telephone or a personal interview may help clear up any misunderstanding of Applicants previously submitted remarks or facilitate resolution of any remaining matters, he is respectfully requested to telephone Applicant's undersigned representative at the number indicated below.

Respectfully submitted,



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